

*Pohled experimentátora –
proč to nevychází?*

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Obsah vědeckého sdělení

- Název
- Abstrakt
- Úvod
- Materiál a metody
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- Reference

Original research

Metaanalýzy

Review

Při čtení tohoto úžasného review, tedy meta-článku, o meta-datech jsem pochopil nicotnost našeho grantového čučkaření. A veden tím meta-fyzikálním pocitem teď hledám lepší finální metu svého bádání!



Prozření postaršího badatele!

<https://vedavyzkum.cz/komix/vedavyzkum-cz-s-nadhledem/91-2020>

Popis experimentu

Steady-state fluorescence spectra

Steady-state excitation and emission spectra of 2 μ M solutions of compounds **5a-d** in methanol or distilled water were recorded on a fluorometer (Fluorolog-3 Jobin-Yvon, France) in a quartz cuvette with 1 cm optical path (both in excitation and emission). The absorbance of the sample at the excitation wavelength should be below 0.05 in all cases, and therefore the inner-filter effect could be neglected. Bandpasses in both the excitation and emission monochromator were set to 3 nm, the spectra were scanned with 1 nm steps and integration time 0.5 s per data point at 22 °C. Emission spectra were recorded with excitation at 480 nm.

Quantum yield (QY) estimation

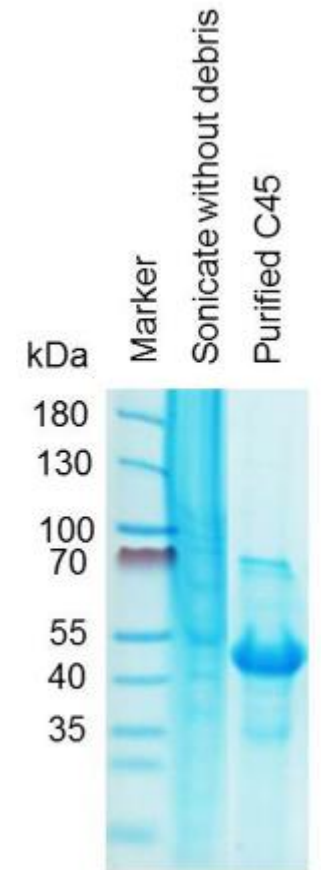
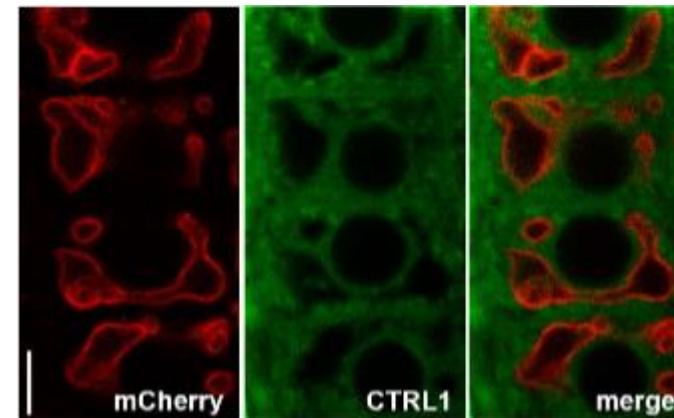
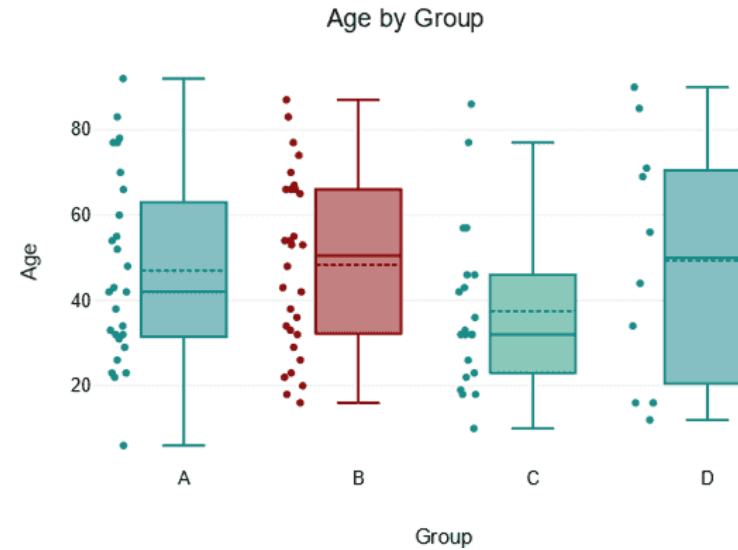
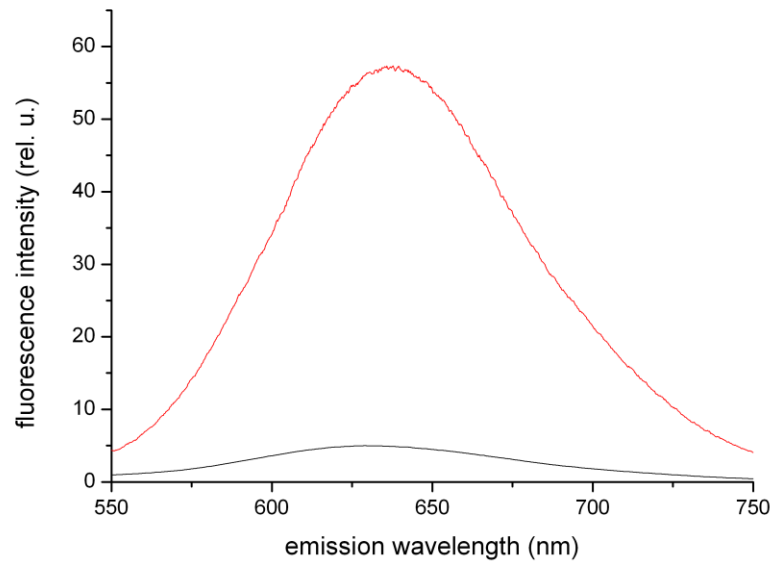
Emission spectra were acquired under conditions described above. The fluorescence intensity was integrated in the 485–700 nm interval, and the quantum yield (QY) was calculated from the formula:

$$QY = \frac{\epsilon_S F n^2}{\epsilon F_S n_S^2} QY_S \quad (2)$$

where ϵ , F and n refer to the extinction coefficient at 480 nm, integrated fluorescence intensity and refractive index, respectively, the subscript „S“ refers to the standard (1 nM fluorescein in 0.1 M NaOH, $QY_S = 0.95$) [24].

Popis výsledků

Protein	No substrate	Mg ²⁺	MgATP	Na ₂ ATP
WT-W411F	8.44 ± 0.40	9.19 ± 0.94	9.10 ± 0.50	8.44 ± 0.18
TL-F404W	9.96 ± 0.50	11.92 ± 0.75	9.47 ± 0.68	9.36 ± 1.02
WT-W385F	10.77 ± 0.93	12.21 ± 0.70	10.79 ± 0.20	10.36 ± 0.51
TL-F426W	12.78 ± 0.56	13.09 ± 1.00	12.53 ± 0.60	11.23 ± 1.05
TL-F571W	14.43 ± 1.23	12.55 ± 0.63	11.22 ± 0.13	9.65 ± 0.27
TL-I627W	14.27 ± 0.68	14.49 ± 0.73	15.25 ± 0.82	15.93 ± 0.84
TL-V648W	20.22 ± 2.38	18.49 ± 0.41	15.80 ± 1.80	10.42 ± 3.07
TL-F683W	10.32 ± 1.00	8.83 ± 0.34	10.21 ± 2.14	12.18 ± 1.12
TL-S732W	12.99 ± 0.75	11.93 ± 0.78	10.97 ± 0.66	10.84 ± 0.52



Co měříme a co prezentujeme ?

	X	→	1/X
X ₁	2		
X ₂	4		
Průměr	3	→	1/3

	X	→	1/X
X ₁	2	→	1/2
X ₂	4	→	1/4
Průměr			3/8



https://medium.com/@soltani_bochra/where-is-the-apple-tree-that-inspired-isaak-newton-7de71a745341

$$1,05 \rightarrow \sqrt[3]{1,05} = 1,016$$
$$m \sim V \sim r^3$$
$$1,05^3 = 1,16 \leftarrow 1,05$$

Nejběžnější prohřešky

Citace

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Neúplný popis

Selekce

Chybný popis



Nevědomost

Lajdáctví

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Citace a autorství

Milé absolventky a absolventi, před převzetím diplomu, prosím, přísahajte na insignie, že žádná vaše práce vzniklá během studia není plagiátem.



Výběr z dat

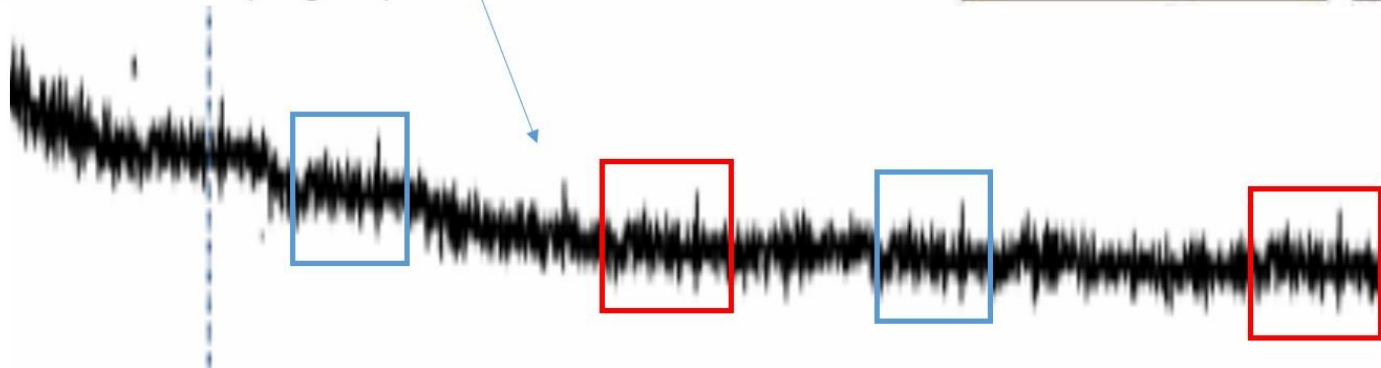
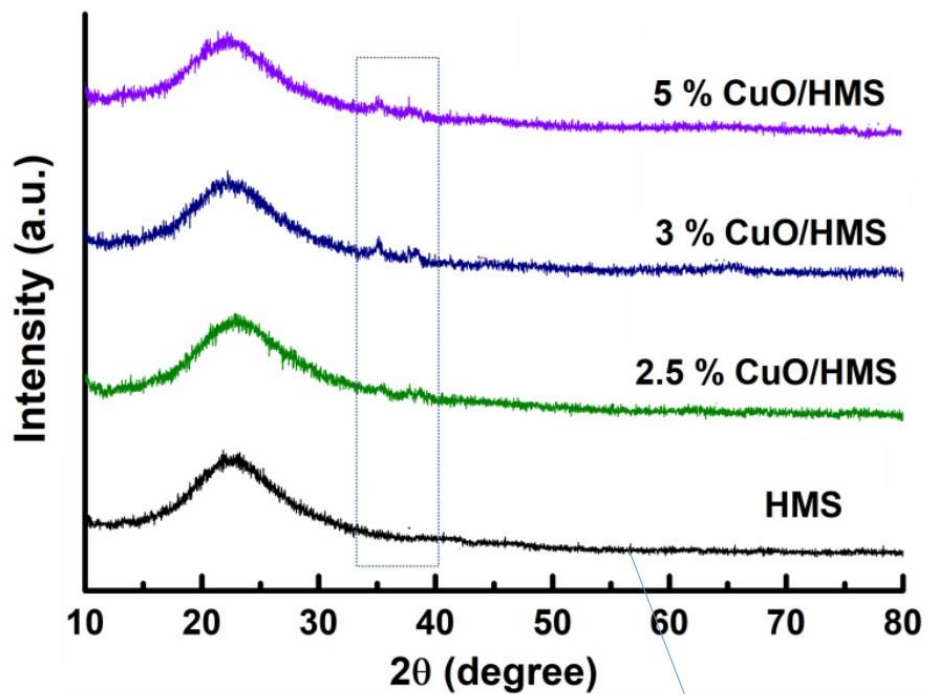


<https://www.technophilicmag.com/2014/07/02/scientific-misconduct/>



Gregor Johann Mendel

Falsifikace dat

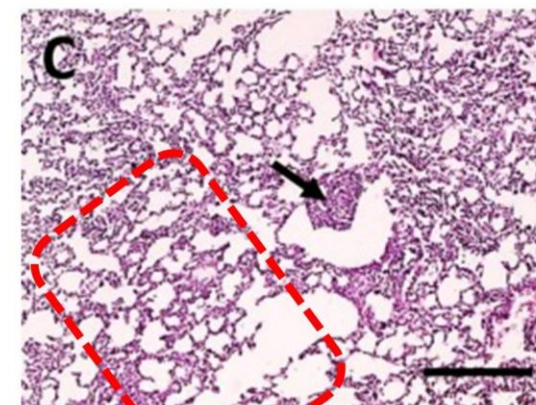
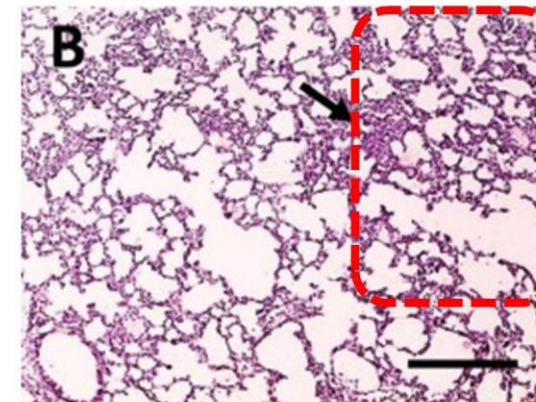
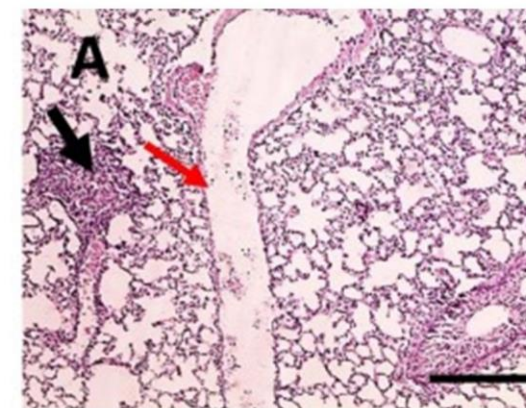
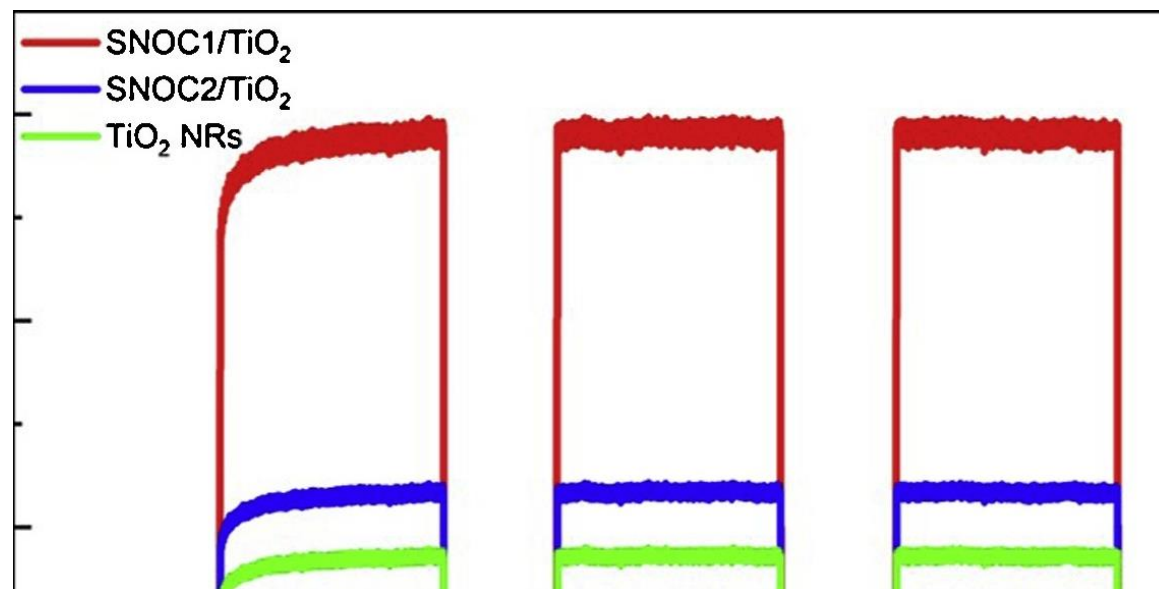
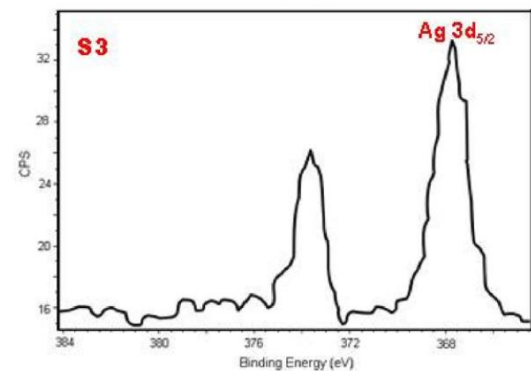
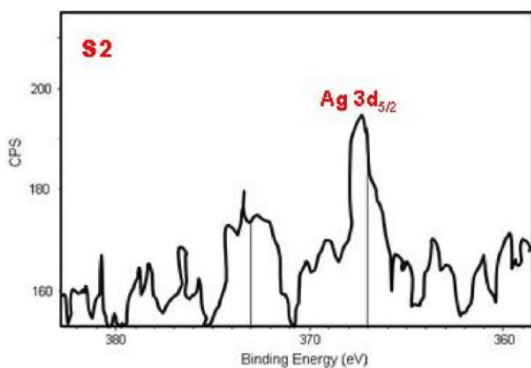
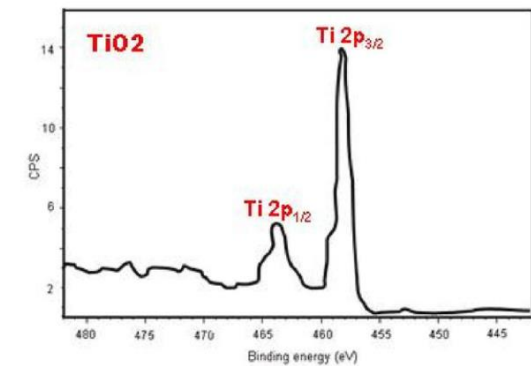


DILBERT By Scott Adams



Fabrikace dat

Fig. 15



Nevědomost



<https://www.livescience.com/planet-earth/nuclear-energy/chernobyl-the-worlds-worst-nuclear-disaster>

Lajdáctví

... za 125 mil. USD

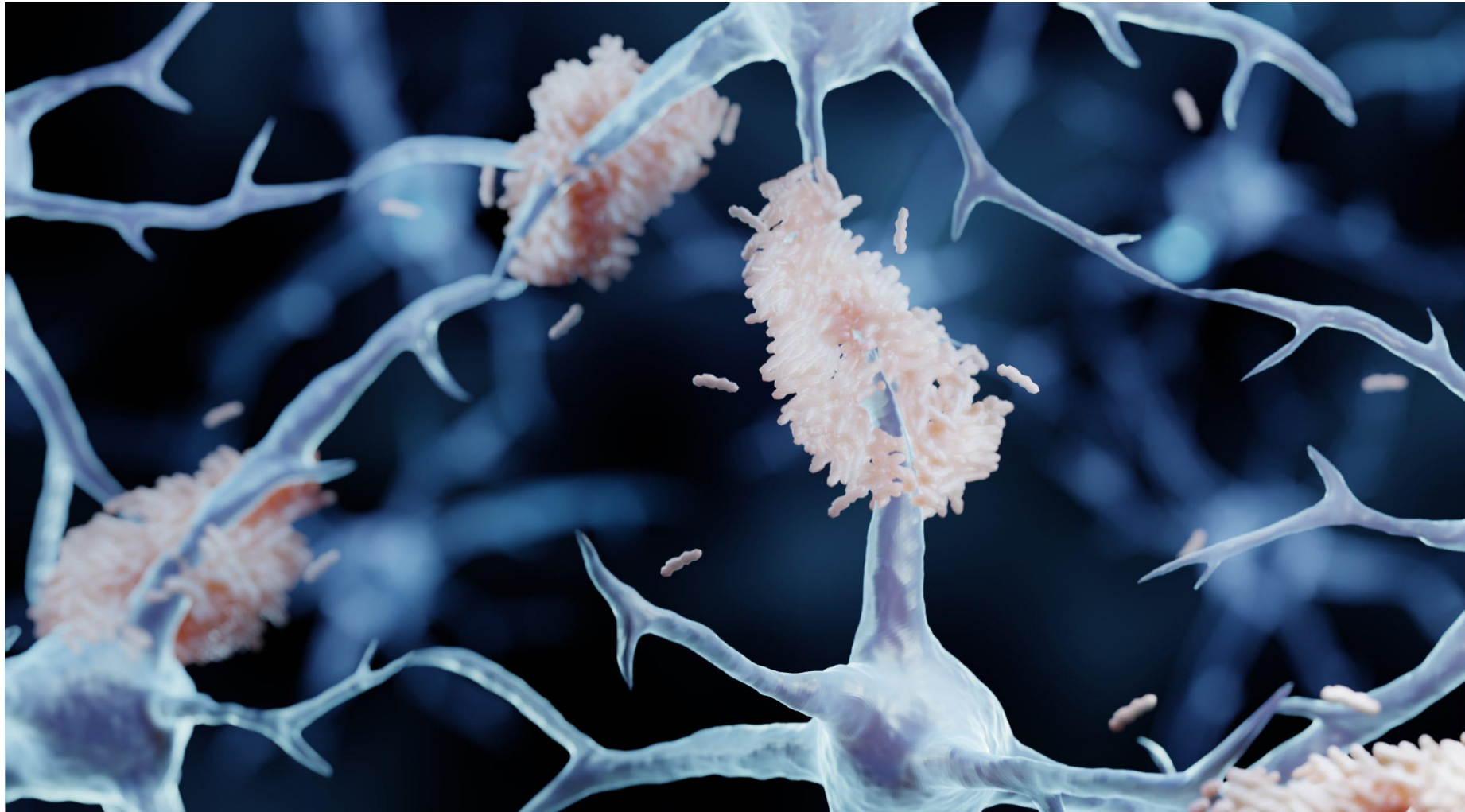


Remember the Mars Climate Orbiter incident from 1999?

<https://www.simscale.com/blog/nasa-mars-climate-orbiter-metric/>

Proč pracovat pořádně a poctivě ?

Alzheimerova choroba - β -amyloid



<https://www.genengnews.com/insights/questionable-data-jeopardizes-alzheimers-amyloid-theory/>



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Monday, March 25, 2019

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Děkuji za pozornost